

Remarks

Applicant has read and considered the Office Action dated May 7, 2008 and the references cited therein. Reconsideration and allowance of the subject application are respectfully requested. Claims 1, 22 and 36 have been amended. New claims 40-50 have been added. Claims 1 and 3-50 are now pending in the subject application. Claims 1, 22, 36 and 40 are independent claims.

In the Official Action, claims 1 and 3-39 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,846,139 to Blair et al. ("Blair"). Applicant respectfully submits that the rejection in view of the cited reference is improper at least for the reasons set forth below.

Independent claim 1 recites a sports simulation system comprising a projectile tracking apparatus that comprises a display surface on which a visually apparent three-dimensional sports scene is presented. The projectile tracking apparatus captures and processes images of a projectile tracking region disposed in front of the display surface to detect a launched sports projectile generally continuously from its launch position, through its travel through the projectile tracking region and to its contact position with the display surface. At least one processing stage receives image data from the projectile tracking apparatus and determines the three-dimensional positions, velocity and deceleration/acceleration of a detected launched sports projectile traveling through the projectile tracking region. The three-dimensional positions, velocity and deceleration/acceleration are used by the at least one processing stage to calculate a trajectory of the launched sports projectile into the visually apparent three-dimensional sports scene. The at least one processing stage uses the calculated trajectory to generate updated image data representing a simulation of the flight path of the launched sports projectile beginning substantially at the display surface contact position and traveling into the visually apparent three-dimensional sports scene following the calculated trajectory so that the simulation represents a realistic continuance of the travel of the sports projectile beyond the display surface.

In contrast, Blair discloses a golf simulator having a housing and three arrays of IR receivers and emitters positioned in the housing. A launch area is established near one end of the

housing, and a user can launch a golf ball located in the launch area and drive the golf ball into the housing through the planes defined by the arrays of receivers and emitters and against a screen positioned at the opposite end of the housing. The planes established by the arrays of receivers and emitters are disposed vertically and perpendicular to the angle of travel of the golf ball. A computer is connected to the IR receivers, **which detect the passage of the golf ball through each respective plane.** Based upon the signals from the receivers and using triangulation techniques, the computer determines the horizontal and vertical position, as well as the velocity, of the golf ball for a range of shots including drives, steep chip shots and putts less than 4 feet. The computer can also determine the spin of the golf ball, and cause an image of the golf ball, as it would have appeared traveling away from the golfer had it not encountered the screen, to be displayed on the screen.

Contrary to the allegation in the Office Action, Blair does not show, teach or suggest Applicant's invention as recited in the claims. Independent claim 1 recites ***capturing and processing images of a projectile tracking region disposed in front of the display area to detect a launched projectile generally continuously from its launch position, throughout its travel through the projectile tracking region to its contact position with the display surface.*** Blair only teaches detecting the launched golf ball at three discrete locations intermediate the launch area and the screen (i.e. the intersection points between the golf ball and the planes). When the launched golf ball is at a location other than one of the three planes, the launched golf ball is not detected. Accordingly, Blair does not detect the launched golf ball generally continuously as the launched golf ball travels from its launch position, throughout its travel through the projectile tracking region to its contact point with the screen. In the Blair golf simulator, the launched golf ball remains undetected as it travels from its launch position toward the first plane, a distance represented by reference character D4. The launched golf ball is detected for the first time when it passes through the first plane and is detected for the last time when it passes through the third plane. The launched projectile remains undetected as it travels between the planes represented by reference characters D1 and D2 and as it travels from the third plane to the screen represented by reference character D3. As Blair fails to show, teach or suggest Applicant's invention as

recited in independent claim 1, Applicant respectfully asserts that claim 1 and the claims dependent thereon, distinguish patentably over the cited reference and should be allowed.

Independent claims 22, 36 and 40 recite subject matter that is similarly believed to distinguish patentably over the cited reference at least for the same reasons set forth above. Accordingly, Applicant respectfully submits that these claims and the claims dependent thereon should be allowed.

In view of the above, it is believed the application is in order for allowance and action to that end is respectfully requested. If a telephone interview would be helpful in this matter, please contact Applicant's Representative at (612) 336-4728.

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers or any future reply, if appropriate. Please charge any additional fees or credit overpayment to Deposit Account No. 13-2725.

Respectfully submitted,



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